

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
20 January 2005 (20.01.2005)

PCT

(10) International Publication Number
WO 2005/005162 A2

(51) International Patent Classification⁷: **B44C 1/00**

(21) International Application Number:
PCT/US2004/021104

(22) International Filing Date: 30 June 2004 (30.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003-186900 30 June 2003 (30.06.2003) JP

(71) Applicant (for all designated States except US): 3M IN-
NOVATIVE PROPERTIES COMPANY [US/US]; 3M
Center, Post Office Box 33427, Saint Paul, MN 55133-
3427 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HAYASHI, Kazuo
[JP/JP]; 33-1, Tamagawa-dai, 2-chome, Setagaya-ku,
Tokyo 158-8583 (JP). OMACHI, Aki [JP/JP]; 17-17,

Todoroki, 8-chome, Setagaya-ku, Tokyo 158-0082 (JP).
OMORI, Masao [JP/JP]; 5500, Osanagi, Higashine-city,
Yamagata 999-3737 (JP).

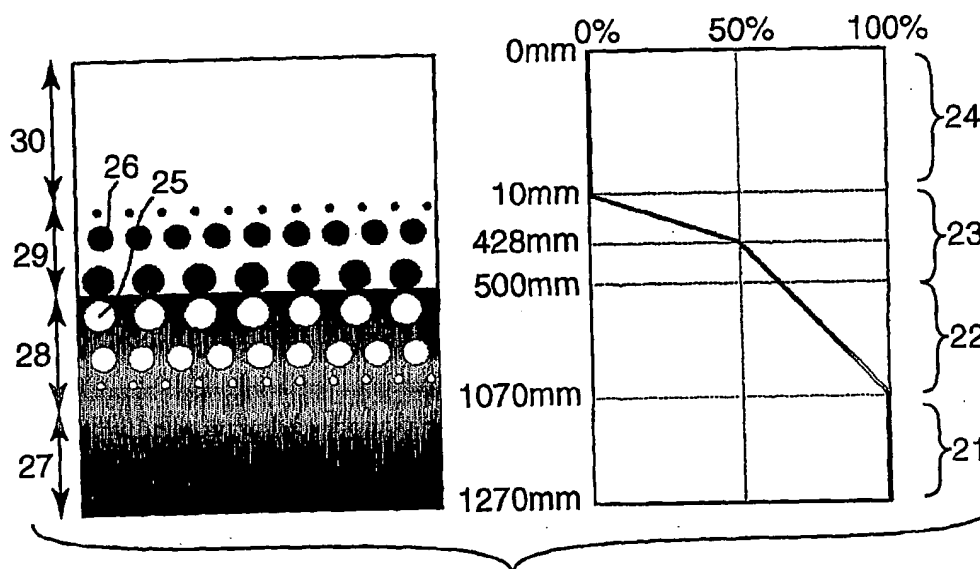
(74) Agents: **PATCHETT, David B.**, et al.; Office of Intellec-
tual Property Counsel, Post Office Box 33427, Saint Paul,
MN 55133-3427 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

(54) Title: SHADING DECORATIVE SHEET



(57) Abstract: A shading decorative sheet comprises a transparent base layer having a back face and a front face opposing to the back face, which comprises a thermoplastic resin film, a decorative layer provided on said front face of the base layer, which has a gradation pattern at least in one direction, and an adhesive layer fixedly provided on said back face of the base layer, wherein said gradation pattern comprises an opaque region having a haze of at least 30% when measured according to ASTM D 1003-00 and a transparent region, and a ratio of the areas of the two regions is changed at least in one direction.

BEST AVAILABLE COPY



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*